DOCUMENT RESUME

ED 227 636 EC 151 093

AUTHOR Palmer, John T.

TITLE Development as a Lifetime Activity: Career Education for Physically Disabled Students.

INSTITUTION Human Resources Center, Albertson, N.Y.
SPONS AGENCY National Inst. of Handicapped Research (ED), Washington, DC.; Special Education Programs (ED/OSERS), Washington, DC.
PUB DATE 80
GRANT 15-P-59039-2-04
NOTE 56p.; A Project PREP publication. For related documents, see EC 151 094-096.
AVAILABLE FROM Human Resources Center, Searingtown Rd., Albertson, NY 11507.
PUB TYPE Reports - Descriptive (141)

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Career Awareness; *Career Education; Career Exploration; Daily Living Skills; Developmental Stages; Elementary Secondary Education; Interpersonal Relationship; Personal Autonomy; *Physical Disabilities; Self Concept; *Severe Disabilities; Special Schools

ABSTRACT

Career education for the severely physically disabled in grades kindergarten through 12 is offered by Human Resources Center, Albertson, New York. The center views career education as a broad developmental process and is responsive to the individual's current developmental stage and experiential background. The development process of the severely physically disabled differs from the person without disabilities. The element of personal responsibility for career choices is an essential ingredient for the disabled person's attainment of personal satisfaction. Three important themes for career education for the severely disabled are self-concept, decision making as it relates to independence, and career awareness needs. It is important to emphasize the strengths of the individual, although the significant others in the life of the disabled individual may often convey an attitude that the disabled person is sick. The center's kindergarten through eighth grade career education program is infused into the regular school curriculum, while for grades 9 through 12, 10-week group guidance programs are provided. Additional components are a speakers' bureau, business ventures, field trips, work experience, an independent living skills curriculum, and research studies. Various publications and audiovisual materials are also published by the center. (SEW)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

1148

Career Education for Physically Disabled Students

Development as a Lifetime Activity

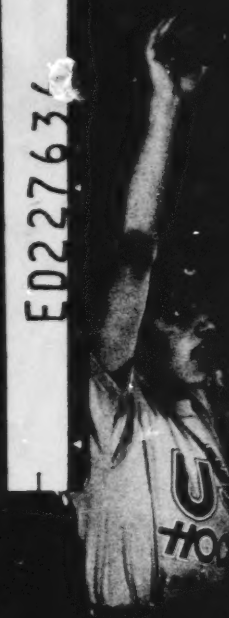
John T. Palmer, Ph.D.

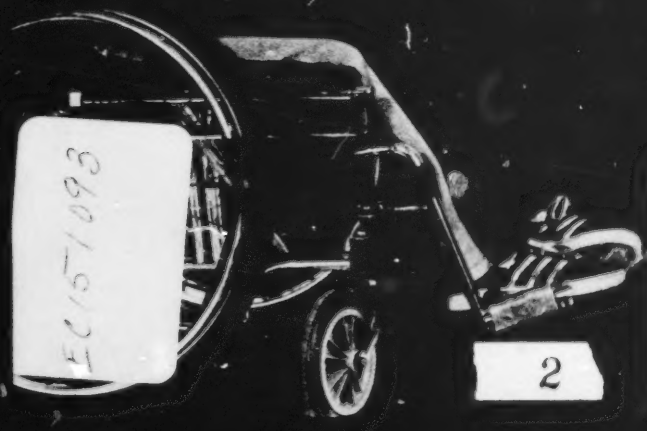
U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

ED227634





EC151093

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
John Palmer
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

A SUMMARY

This paper discusses career development in terms of a lifelong activity. The point of view taken is that for development to occur there is a need for the individual to be spurred on to growth through interaction with the environment. The development process of the person with severe physical disabilities is viewed as being different from that of the person without disabilities. Regardless of these differences, the focus of any intervention program is to aid the individual to select a career that provides satisfaction.

A career is defined as a "life-style of choice" with the element of personal responsibility for choices made being the essential ingredient which leads to personal satisfaction. For the severely disabled, the three themes: self-concept, decision-making as it relates to independence, and career awareness needs to be the basis of the career development program.

The need for emphasizing the strengths of the individual and for looking beyond the disabling condition is stressed. The case is made that the significant others in the life of the individual often convey to the developing individual an attitude that they are "sick" or "impaired," even though the medical crisis has been stabilized. The need for parents, peers, and professionals to check their attitudes in terms of the image they project to the person with disabilities is stressed.

A brief discussion of a K–12 curriculum based on the above concepts and its overall evaluation concludes the paper. For further details on the curriculum components the reader is referred to other monographs in this series.

Career Education for Physically Disabled Students Series

A Bibliography

Speakers' Bureau

Classroom Business Ventures

Field Trips/Media Projects

A Work Experience Program

Self-Concept Curriculum (K–8)

Career Awareness Curriculum (K–8)

Decision-Making/Transitional Living Experience Curriculum

Evaluating a Career Development Program

Adapting the School Environment

Career Education for Physically Disabled Students
DEVELOPMENT AS A LIFETIME ACTIVITY

JOHN T. PALMER, Ph.D.
Director of Educational Research

A Project PREP Publication

Research and Training Institute
national Center on Employment of the Handicapped at
HUMAN RESOURCES CENTER
Albertson, NY 11507

© 1980 Human Resources Center

All rights reserved, including the right of reproduction in whole or in part, in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without permission in writing from the publisher. Inquiries should be addressed to Human Resources Center, Albertson, NY 11507 or to the National Institute of Handicapped Research, Department of Education, Washington, DC 20202.

The research upon which the publication resulted was supported by Research Grant #15-P-59039/2-04 which was jointly funded by the National Institute of Handicapped Research and the Bureau of Education of the Handicapped, Department of Education.

The printing of the publication was supported by the W.K. Kellogg Foundation for the national Center on Employment of the Handicapped at Human Resources Center.

Library of Congress Catalog Card No. 80-82642

Printed in the United States of America

Contents

Foreword vii

Preface ix

Acknowledgments xiii

Introduction xv

THE NEED FOR A CAREER DEVELOPMENT PROGRAM 3
CAREER DEVELOPMENT DEFINED 5
A POINT OF VIEW 9
THE PROGRAM 11
- Self-Concept 11
- Decision-Making Related to Independence 14
- Career Awareness 18

SIGNIFICANT OTHERS 20
- Parents/Family 20
- Peers 22
- Rehabilitation, Education, and Employment Professionals 23

CAREER EDUCATION OVERVIEW 25
- Elementary Curriculum Materials — Grades K–8 25
- Curriculum Activities — Grades 9–12 26
- Activities Across the Total School Program 27
- Evaluating the Program 28

REFERENCES 30
THE CAREER EDUCATION PROGRAM 33
- National Career Education Advisory Council 35

HUMAN RESOURCES CENTER: AN OVERVIEW 37
- Human Resources Center Executive Staff 38
- Project PREP Professional Advisory Council 39
- Project PREP Staff 40

HUMAN RESOURCES CENTER PUBLICATIONS 41

Foreword

Human Resources Center began in 1952, when we founded Abilities Inc., a work environment intended to demonstrate the capability of disabled individuals for participation in America's competitive economy. Had someone told me then that someday I would be president of an organization that included an internationally renowned demonstration work center, a school which provides educational, vocational, social and recreational opportunities for severely disabled youngsters and attracts thousands of visitors every year, a Center whose programs encompass job training and placement, academic and vocational education, independent living, research, and information dissemination, and a national Center on Employment of the Handicapped, I would have asked him to step aside and let me continue with the business of the day while he dreamed for me.

Now, 28 years later, we have assembled under the auspices of Project PREP the finest staff of researchers in vocational rehabilitation and career education in the world. We are charged with a great responsibility — to reach out to communities across this nation and share with them the knowledge we have amassed that helps prepare disabled individuals to become independent and productive citizens.

During my tenure as Chairman of the White House Conference on Handicapped Individuals, I had the opportunity to travel all over the United States meeting with disabled people, members of their families, and other interested parties. I found that more than three million disabled individuals in the United States ask little more than the opportunity to receive an education, secure a job, and become taxpaying, contributing citizens of this great nation.

It is our destiny at Human Resources Center to unite several great forces in our nation's economy — industry, organized labor, education, and rehabilitation — in a monumental effort to provide opportunities for handicapped Americans to achieve their fullest potential as human beings.

Henry Viscardi, Jr.
President

Preface

Since 1952, Human Resources Center has created methods to integrate the nation's disabled into the mainstream of American life. This effort has centered particularly on the problems of job preparation and placement.

In 1976, a major five-year program was launched to examine issues related to the career development of the severely physically disabled, especially during the transition years from school to work. This program, known as Programmatic Research on Employment Preparation (Project PREP), examines the roles of the education, rehabilitation, and employment communities as they interact to create an environment most conducive for career fulfillment for the disabled. The results of this research are providing the foundation for a national Center on Employment of the Handicapped to be established at Human Resources Center.

The Project is involved in developing and testing a career-development model for those with severe physical disabilities. This model is being formed on the basis of information from three major research components — Career Education, Vocational Rehabilitation, and Employment. Each of these areas is being studied to determine (a) contributions from each sector that promote, or have the potential to promote, career development; (b) gaps in knowledge in relation to career needs of students, clients, and other individuals with severe physical disabilities; and (c) methods to utilize the contributions found in item (a) and other techniques, in order to fill the gaps discovered in item (b).

This search enlists the help of experts throughout the nation from education, rehabilitation, industry-labor, other related fields and, primarily, the disabled themselves to find solutions to these important problems. Findings will be disseminated nationally through publications, conferences, multimedia materials, and training and technical-assistance programs. Target audiences include researchers, disabled individuals and their families, educators, rehabilitation practitioners, employers, labor-union personnel, government officials, and other interested individuals.

Human Resources Center provides an ideal setting for this project. The school and rehabilitation services provide laboratories for gathering in-

formation and for testing out ideas to understand the "supply" side of the labor market equation. The Center also sponsors the Industry-Labor Council, whose hundreds of corporate and union members comprise a significant portion of the "demand" side.

Specific foci of each research area are as follows:

Career Education. Career Education provides the opportunity for students who are disabled to increase their awareness and knowledge of the world of work. Special needs of students with severe physical disabilities are addressed through curricula developed for self-concept, decision making as it relates to independence, and career awareness. These curricula are being tested and their impact evaluated through student, teacher, and parent feedback. Finally, research will be undertaken to explore mainstreaming needs and to develop strategies for more effective mainstreaming of students with severe physical disabilities.

Vocational Rehabilitation. This research area explores the problems involved in the preparation of clients for meaningful career opportunities. This research is concerned with job readiness, placement, and career development. While emphasizing the placement aspects of vocational rehabilitation programming (e.g., job-analysis, job-development and job-search skills), the importance of adequate evaluation and training programming is also covered to establish the parameters for adequate preparation.

The research incorporates the viewpoint and knowledge of disabled individuals and their families, employers, rehabilitation professionals, and other manpower specialists on problems of entering, maintaining, and advancing in employment.

Employment. The final core area is aimed at discovering the problems of industry-labor and employees in the provision of career opportunities for individuals with severe physical disabilities. This research attempts to discover major adjustment problems of disabled workers so that deficits can be addressed via alterations in the career education, vocational rehabilitation, and/or employment systems. This research attempts also to identify strategies used in industry that may be relevant for inclusion in career education and/or vocational rehabilitation programming.

Studies will concern the career patterns of disabled workers as well as the organizational patterns of employers with respect to provision of career opportunities. Research also will identify the extent to which job-modification techniques have been adapted and found useful by employers and unions.

The above areas are seen as aspects of the overall development of an individual from school through work as he/she prepares for, realizes, and enhances a career. Project PREP seeks to identify and explicate this process and its components. An important aspect of this work will be a description of

how education, rehabilitation, and industry-labor can interrelate to provide a smooth path for individuals with severe physical disabilities to achieve maximum independence and fulfill their productive potential.

Jack Victor, Ph.D.
Director of Research and Research Utilization

Acknowledgments

I would like to thank the many people who encouraged this publication:

Dr. Jack Victor, Director of Research and Research Utilization, for his patience, support, and encouragement.

Maria Stieglitz, Paul Henfield, and Cathy Lombardi for their ideas, their patience, and their suggestions as they reviewed the monograph.

Drs. Gene Hedley, Harold Munson, and Kathryn Reggio who received earlier drafts of the paper and offered constructive suggestions which improved the paper.

Marcella Putala, Jane Berger, and Sue Hamberg for their work in making this a visually attractive and professional paper.

Constance Scarabino who typed the paper so often that she can recite it verbatim.

To my wife, who, after reading the first draft, encouraged me to rewrite the paper.

Introduction

This paper is designed for use by the classroom teacher, and/or counselor, or the interested parent who may be involved in planning an educational program with an emphasis on career development. The materials discussed present a theoretical framework and an overview of a career development program developed at Human Resources Center in Albertson, New York. The specific content of the varied elements of the Human Resources Center program will be the subject of other monographs. While the population for whom this program was developed is a severely physically disabled population, the program elements are applicable to the able-bodied as well. The teacher, counselor, or parent reading these materials will readily see the application to his/her own setting.

The population used for developing this program included people with a number of physically handicapping conditions, including neurological involvement, such as cerebral palsy, hydrocephalus, spina bifida and spinal-cord injury; health handicaps, such as heart disease and hemophilia; muscular problems, such as muscular dystrophy, spinal muscular atrophy; and orthopedic difficulties, such as amputation, rheumatoid arthritis, Legg Perthes disease, osteogensis imperfecta, and scoliosis. While this listing may be overwhelming, the attitude taken throughout this paper will be to think beyond the handicap and to view the child as more like other children than unlike them and to focus on his/her progress and strengths rather than on his/her deficits.

Functional problems in learning, speaking, perceiving the environment, mobility, and self-care are part of the total picture for each of the above handicapping conditions. While the degree of these functional problems varies according to each disabling condition, as well as to each individual, the approach taken in this paper is to deal with physically handicapping conditions as a universe involving one or more of the functional problems listed above. No attempt will be made to discuss each condition, for such material is covered in other sources, some of which will be cited at the end of this monograph.

Human Resources Center's school is conducted through funding by New York State as well as private sources. The school spans the years from infancy through high school and presents an essentially academic curriculum,

with an increasing number of students being serviced through Learning Resource rooms. With the advent of The Education for all Handicapped Children Act of 1975 (Public Law 94-142), an increasing number of students are being mainstreamed back to "feeder" school districts. While the paper will concentrate on the theoretical bases of the program being developed at Human Resources Center, implicit in this monograph and the other monographs of this series are the operational concerns of developing and implementing a full program in *any* school setting.

Career Education for
Physically Disabled Students

DEVELOPMENT AS A LIFETIME ACTIVITY

The Need for a Career Development Program

As of 1972, the Social Security Administration surveyed persons with disabilities in the labor force and found these individuals to be, for the most part, underemployed (i.e., working less than full time) and underutilized in that they tended to be grossly overrepresented in low-paying, dead-end, service-type positions. Levitan and Taggart (1977), in summarizing this data, point to the fact that persons with disabilities are frequently unemployed and/or underemployed, a situation that results in staggering costs to society. This group comprised the majority of persons not in the labor force. In addition, unemployment rates of disabled persons are twice those of the nondisabled. Disabled persons have lower earnings and income than nondisabled and have a higher incidence of underemployment at all points of their working lives. Studies repeatedly show that returning the disabled to the labor market is a sound economic investment. While increases in productivity occur, other gains accrue, such as reduced dependency on relief or public-assistance programs, and the dignity and self-respect that comes from independence when independence is possible (Berkowitz, Englander, Rubin, and Worral, 1975).

When employment is obtained, little consideration for future jobs or for job advancement is evidenced. Persons with disabilities, for the most part, obtain employment in secondary labor-market areas, and/or dead-end jobs. There is little evidence to suggest that the unemployment, underutilization, and underemployment of disabled persons reported in the 1972 survey of the Social Security Administration (Levitan and Taggart, 1977) have materially changed.

The outlook is just as bleak when one looks beyond entry-level employment and examines career-laddering potential. Either higher slots are already oversubscribed through seniority lists or additional unanticipated experiences are required to move up. What is even more disconcerting is that career ladders involve steps where the disabling condition becomes a severe handicap, locking the client out of future advancement.

The need to intervene in the career development process of persons with disabilities is apparent from the above brief discussions. What can be done to intervene in the career development process of physically disabled

students who will be entering the labor market with such dim prospects? What can be done to offer them a satisfying career?

The materials that follow will provide the reader with a synopsis of career education materials which will provide a fuller understanding of the constructs underlying the program developed at Human Resources Center.

Career Development Defined

Hansen (1977), in a thoughtful examination of the definitions and concepts related to career education, developed the proposition that, if career education is to be more than a passing fad in the educational scene, the one unifying theme which will sustain career education as an entity will be the concept that career education must be linked to the career development of individuals over a lifetime, whether those individuals be at home, in school, or at work. This view maintains that career education should be a broad developmental process involving theoretical and research knowledge available from developmental psychology, career development theory and research, vocational psychology, occupational sociology, industrial relations and labor economics. This approach holds "the most promise for meeting the challenges of human career needs and for creating viable programs with a chance for support from theoreticians and practitioners alike" (Hansen, 1977, p. 18).

The physically disabled person experiences a career development process in much the same manner as the able-bodied. The careers pursued are based upon the direction and thrust of previous choices made throughout the individual's life. For a severely physically disabled individual, the range of choices and direction of these choices will differ from those of able-bodied individuals because of the different cultural backgrounds. For example, an able-bodied adolescent is able to move about freely in the neighborhood, has many opportunities for social interchange with peers because of this mobility, and has initial encounters with work tasks by participation in fledgling experiences as a worker through household chores. The physically disabled adolescent, on the other hand, may not have these developmental experiences because of the nature of the disability. The socializing experiences of the disabled youth may be built around medical environments and experiences which center on relating to adults, i.e., parents, doctors, and nurses, rather than peers. Furthermore, it is not uncommon to discover that a number of physically disabled students have little or no experience with developmental work tasks such as household chores because of the restricting nature of the disability or an overprotective environment.

Just as the experiential backgrounds of other minority groups have been determined to be culturally different from the mainstream of American

society, so is the experiential culture of the emerging physically disabled young adult different. To this extent, therefore, Hansen's emphasis on the need to direct the attention of career education programs to the career developmental theories is of special significance for the physically disabled. There is a need to become more sensitive to the developmental patterns and experiences of this population. There is a need for the development of a program that will have relevance to the nature of the population and intervene successfully in the developmental process as experienced by the students.

Viewing a career education program for the physically disabled from a developmental perspective allows the flexibility to deal with each individual at his/her current stage of development. In this way a number of alternative directions can be provided to stimulate growth in the experiential base necessary for making informed, reasoned career choices as the student grows into adulthood.

A career, for the purposes of this paper, is defined as a *life-style of choice*. For physically disabled young adults, the choice of possible life-styles may or may not include paid employment. For some, the nature of the disabling condition may be such that competition in the daily job market may be too much of a physical drain to be pursued successfully as a career. For others, a limited paid work experience or a full-scale competitive employment pattern may be available options. Just as for the able-bodied for whom a continuum of options stretching from full-paid employment to life-styles that do not include paid employment, so too for the disabled, this range of life-

styles is open. Just as for the able-bodied whose options are limited by such variables as education, experience, social-economic status, sex, race, and so forth, so too for the disabled the options are limited by the same variables. In addition, there are restrictions imposed on them by the nature of their disabling conditions and the social reaction to the disabling conditions.

An educational program in career development for the severely disabled, therefore, must relate to the individual's developmental process. It must provide activities that will enable the emerging adult to become aware of the multiple options available in order to make reasoned choices for a life-style which will provide the greatest personal satisfaction.

The element of choice is a significant part of this definition of career because it is essential that, for satisfaction to occur, regardless of the life-style chosen, the responsibility for the choices made must lie with the individual (Goleman, 1980). The need to develop a sense of responsibility and a sense of control over one's destiny is especially significant for the physically disabled person because, in many instances, a role of physical dependence has been created by the nature of the disability. This sense of physical dependence can lead to psychological dependence, which is devastating because it undermines the stability needed to achieve the transition to adulthood and relegates an individual to the role of a child in an adult world. This developmental sense of dependence must be dealt with through activities that stimulate growth in feelings of self-worth and dignity as well as growth in the sense of the feeling that what happens to one's life depends solely on oneself and is not subject to the whims of well-meaning others, whose actions may serve to undermine the individual's right to independence. Of course, the right to choose carries with it the responsibility for one's choices.

For an intervention program in career development to have meaning, the philosophical postulates offered by Foster, Szoke, Kapisovsky, and Kriger (1977) are essential as a frame of reference for the counselor, teacher, or parent developing the program:

> 1. Persons who are disabled have the same psychological needs as nondisabled persons. A disability in no way diminishes an individual's need for love, respect, productivity, and autonomy.
>
> 2. No matter how severe their impairments, persons with physical disabilities have within themselves the potential for resolution of their difficulties and for self-actualization (p. 103).

This view of freedom implies an unfinished growing structure tending toward a given direction of closure. This perspective relates to Allport's (1955) description of personality structure, which is described as "broad intentional

dispositions, future pointed ... unique for each person which tends to attract, guide, inhibit the more elementary units to accord with the major intentions themselves" (p. 92).

The purpose, therefore, of any intervention program in career development is to stimulate the personality structure of the individual to strive toward its fullest development. Therefore, the philosophical base for an educational program in career development for the severely disabled must be built on the following bases:

1. Career education must be thought of in terms of career development if it is to have any lasting appeal to researchers and practitioners in the field of education.
2. The developmental process is individual and is affected by the experiential base of the individual.
3. The cultural base of physically disabled individuals differs from that of the able-bodied and must be understood if a relevant intervention program is to be designed.
4. A career is a life-style, in that it reflects the values and assumptions that stem from membership in various groups and the sharing of the customs and mores of these groups.
5. A range of life-styles exists for both able-bodied and disabled individuals, and this range extends from paid employment through life-styles that do not include paid employment.
6. The range of options open to the able-bodied and the physically disabled populations is limited by variables that are part of the structure of society and/or the nature of the disabling condition.
7. Reasoned choices of life-styles and the assumption of responsibility for these choices by the individual are essential for that person to achieve a sense of satisfaction through his/her career choices.
8. For the emerging adult who is physically disabled, this sense of control over one's destiny is of special importance as a means of stemming psychological dependence, which may be an outgrowth of physical dependence.
9. The overall goal of education in general and educational programs in career development in particular is to direct the individual toward self-actualization.

A Point of View

The above material presents a broad philosophical point of view that would form the basis of any intervention program in career development. It also presents a particular view of the learner and the learning situation, which must be noted before embarking on a fuller description of an intervention program for a severely disabled population.

The learner is viewed as an active participant in the learning situation. Therefore, the school must nourish the child's interaction with the developing environment. Since development is defined as progression through ordered sequential stages, the goal of any educational program is the eventual attainment of a higher stage of development — not merely the healthy functioning of an individual at a present level. In fact, education's proper role is to promote development through the presentation of reasonable problems or conflicts designed to stimulate the child to organize and/or reorganize his/her experience. Experience is viewed as essential to stage progression, and some degree of discomfort must be experienced if growth is to occur. This may involve exposing a child to a higher level of thought and conflict, requiring the active application of the current level of thought to problematic situations.

For adults who deal with physically disabled students, such a point of view may appear to be too difficult because of their concern about the health of the child. It may be argued that a person with a disability must be given a certain latitude in the developmental process because of the nature of the disability. Of course, individual differences must be taken into consideration to relate to the unique, individual, experiential process for the severely disabled person. Such reservations, in effect, could deny the disabled individual the opportunity to grow and develop to his/her fullest potential.

While thus far the similarities of able-bodied and disabled students have been emphasized, there are differences between these two populations that must be dealt with to provide the base from which a broader spectrum of similarities may emerge.

Many disabled students have lived in a medical environment during the formative years of their lives. This medical environment has the following disadvantages:

1. It reinforces the "sick-person" concept in the mind of the child.

2. It raises the anxiety level of parents and families of disabled children and sends out constant signals to children that reinforce their feelings of helplessness. As these children enter adulthood, their feelings make it difficult for them to assume an adult role in society.

Such an environmental background is demeaning and robs emerging adults of their rights and dignity as free and independent human beings.

The basic philosophy being espoused in this educational program asserts that most of the medical presence in the life of the developing child, once the medical crisis is under control, is both unnecessary and unproductive. It is further assumed that management of medically stabilized disabilities is primarily a personal matter and the responsibility of the disabled person; it is only secondarily a medical matter.

Of major importance is the concept that the sick role is, by its nature, a temporary one. For the long-term, permanently disabled person there is no immediate recovery in the sense of being restored to one's original physical condition. Acceptance of a sick role (Gleedman and Roth, 1980) by the disabled person carries with it a loss of full human status. This role is totally unacceptable and must be dealt with if disabled people are to achieve a parity on their terms with able-bodied peers.

The point of view being espoused here categorically rejects the behavioral expectations created by both the sick role and its derivatives, especially the "impaired" role. Human Resources Center asserts that the disabled do not want to be relieved of their familial, occupational, and civic responsibilities in exchange for childlike dependency. In fact, this "relief" is considered tantamount to denying the disabled their right to participate in the life of the community and their right to full personhood (Safilios-Rothschild, 1970, pp. 73-81).

This developmental, experiential, stimulation framework is the cornerstone of the program to be described.

The Program

What are the three most pressing needs of a severely disabled population that, if effectively managed, would enhance career-development patterns? After an extensive review of the literature, consultation with advisory councils, and advice from practitioners in the field, the following broad-based needs have been identified:

1. The need to develop a positive self-image.
2. The need to develop a sense of control over decisions in one's life as they relate to one's level of independence.
3. The need to enhance the career awareness of students so they can effectively make reasoned choices from a wide variety of options.

These three themes form the conceptual base of the program developed at Human Resources Center.

SELF-CONCEPT

The available research seems to indicate that children and young people with physical handicaps have a more difficult time with psychological adjustment than do nonhandicapped people (Calhoun, 1979).

Pless (1976) estimates that children with clinical disorders experienced significant delays in their psychological development at a rate of 15 to 20 percent higher than the rate of occurrence of these delays among comparably healthy children.

Individuals with severe disabilities are subject to experiential differences directly caused by the disability. Overprotection and underestimation by significant others (parents, counselors, teachers) in the experiential framework of the child may cause a child with a severe disability to internalize

beliefs that disabled persons are inherently different or inferior, that they are dependent both physically and psychologically, that they are nonsexual beings, and that their disability permeates their entire life space (Foster et al., 1977).

Given this background, some children who are physically disabled may yet reach young adulthood without the self-awareness, skills, and self-esteem that contribute to personal adjustment. Thus there is the need to provide opportunities for these youngsters to acquire the interpersonal skills, the coping orientation, the independent living skills and, above all, the acceptance of self that leads to self-actualization.

Growth in feelings of self-worth and self-esteem is incremental and developmental. It is developed through daily interactions with the environment. *These activities must be designed to* (a) emphasize what the person can do; (b) stress that the areas of life in which the person *can* participate are seen as worthwhile; (c) encourage the person to play an active role in molding his/her life constructively; (d) appreciate the accomplishments of the person in terms of benefits to the person and others; (e) stress that for the most part the negative aspects of a person's life, such as the pain that is suffered or difficulties that exist, are manageable; (f) demonstrate that managing difficulties means overcoming them or ameliorating them through the application of medical procedures, the use of prostheses and other aids, learning new skills, and accommodating the environment; (g) indicate that managing difficulties also means living on satisfactory terms with one's limitations.

Above all, this means viewing the disability as nonevaluing and fosters seeking satisfaction in terms of one's assets (Wright, 1974).

Of particular concern for the physically disabled child is the heightened anxiety about his/her body that may occur during adolescence. For the able-bodied adolescent, this period is marked by concern about height, weight, color of hair, and general attractiveness. For an adolescent who is physically disabled, anxiety over physical development may be heightened and have a detrimental effect on self-concept.

As the child matures to adulthood, the normal developmental sequence centering on sexual development may be a further source of confusion. The child with a disability experiences emotional changes similar to those of an able-bodied adolescent, but may be thwarted in his/her attempts to express these feelings naturally. The stress and strains of adolescent growth must be dealt with as part of the regular curriculum. Developmental activities related to human sexuality must be infused into the regular classroom curriculum to deal with these concerns naturally and to relate to the developing sexual drive of the disabled student.

To deal with these concerns relating to developing and/or maintaining a positive self-concept, a series of curriculum activities must be infused into the language arts, social studies, mathematics, and science curriculum throughout the school program. These activities would deal with self-awareness, body image, and coping mechanisms necessary to assist the developing child to feel good about him/herself. A separate monograph in this series describes the self-concept curriculum materials. The significance of these activities is that they are designed to flow as a part of the regular academic curriculum and are encountered by the student as part of his/her everyday environment. The activities desribed in this self-concept activities monograph are applicable to able-bodied students as well as the physically disabled.

For a physically disabled student who may be concerned with body image, functional capacities, and feelings of self-worth and dignity, such a structured developmental set of activities is necessary to stimulate growth in feelings of self-esteem. This personal development cannot be left to chance and must be dealt with on a day-by-day basis. Positive experiences built on positive experiences reinforce the feelings of the individual's dignity and worth.

DECISION-MAKING RELATED TO INDEPENDENCE

The issue of dependence versus independence may be especially frustrating for the child with a severe physical disability. Since all students need to feel that adults believe in their potential for becoming reasonably independent and self-sufficient, the materials for building these qualities must be real and concrete. The school must provide an opportunity for students with a physical disability to acquire skills for achieving the maximum possible independence in the areas of mobility, self-care, work, and interpersonal relationships (Foster et al., 1977).

Decision-making-skills development also cannot be left to chance. It must be learned through practice. All students, whether disabled or not, should be encouraged to reason and work things out for themselves. Mitchell (1978) reported that half the population of thirty-five thousand seventeen-year-olds was unable to identify a nonsignificant point from a significant one in making a decision. Students, in making career decisions, need to examine their own values in light of employment facts, to establish goals appropriate to their needs and interest, and to learn how to change the self and/or the environment to achieve an acceptable career. The purpose of all of the curriculum activities developed for use in any K-12 program for severely disabled students must foster the realization in the mind of the disabled child that he/she is responsible for the direction of his/her life and that choices and decisions made throughout the educational experiences will assist in developing the ability to make responsible decisions throughout life.

Tiedeman, Katz, Miller-Tiedeman, and Osipow (1978) reported that one of the findings of a cross-sectional study of career development indicated that "the most basic career skill is a fully developed capacity to differentiate what one causes in one's environment and to take appropriate responsibility for that which one does cause ... Less than fifty percent of the nine-year-olds and thirteen-year-olds tested take responsibility for what they cause" (pp. 21-22).

Tiedeman et al. further reported that a gap exists between constructs that derive from examined values and those that derive from unexamined values. The things that pop into people's heads and their responses when they have not subjected their values to close scrutiny are often less important to them than the things they emphasize when they have thoroughly explored and examined their values. These results show that many people do not bring their own most important career values into explicit awareness as they make career decisions. The purpose of the curriculum materials developed through any career development program must be to train students in the decision-

making process. Values clarification materials have been shown to be effective in developing the decision-making skills of young adults. Such materials should form an integral part of the secondary curriculum.

The philosophical orientation of the decision-making aspect of the career education curriculum finds its more recent roots in the open education movement and may be traced back to a philosophical base in the works of John Dewey. A major tenet of this approach to learning is to provide a child with an ever-increasing realm of responsibility in selecting what is to be learned and when it is to be learned. This approach to learning places on the learner more and more responsibility to assume an active role in learning process.

For such an approach to be effective, there is a great need for the teacher to be extremely well organized and to prestructure the learning environment in such a way that there is no doubt that the teacher is the mature mind influencing the immature mind. The learning environment, therefore, will provide the child with repeated experiences for making decisions and, therefore, will allow growth toward independence.

To achieve such growth, it is necessary to create a mind set on the part of the instructional staff so that opportunities for growth in responsibility are part of the classroom experience. It is the skilled teacher who structures these opportunities, observes the growth of the child, and provides further stimulus to growth without significantly threatening the security of the child. It is also necessary to identify elements in the curriculum that relate to skills the child must have in order to be independent. For the severely physically disabled student, a number of these competencies relate to health care, safety, budgeting, mobility, and socialization. Activities related to these competencies will provide concerted effort in the regular classroom activities to effect growth in the decision-making skills necessary for successful daily living as an adult.

Our philosophy of independence for the disabled student is based on three major assumptions or propositions:

> *Consumer Sovereignty.* Disabled persons (consumers), not professionals, are the best judges of their own interests; it is they who should ultimately determine how the services they use are organized.
>
> *Self-Reliance.* Disabled persons must rely primarily on their own resources and ingenuity to acquire the rights and benefits to which they are entitled.
>
> *Political and Economic Rights.* Disabled persons are entitled to pursue freely their interests in various political and economic areas (DeJong, 1979).

The internalization of the sense of independence and responsibility for causality for what happens to oneself throughout life experiences cannot be left to chance. It must be approached in a developmental, organized manner

through activities that recognize the developmental processes of the child and are integrated into the student's everyday curriculum.

The purpose of all curriculum activities developed for the K-12 program for severely disabled students is to foster the realization in the minds of disabled students that they are responsible for the direction of their lives and that choices that they make during their school years will assist them in developing the ability to make responsible decisions during the rest of their lives.

A major area of concern for the severely physically disabled child is the development of independent living skills. At Human Resources Center, there is an adapted residence which is used as a laboratory for a live-in experience of varied duration to test out the level of independence of each student and to stimulate further growth in independence. The program, which is in an embryonic stage, centers on curriculum instruction in personal management, home management, and economic management prior to the live-in experience. For many students, this is their first experience living away from home with other students in a nonmedical environment. When this program is fully developed, it will be the subject of a monograph for use in special settings and for providing practical suggestions to educators in regular school settings who may be anxious about taking disabled children on overnight field trips.

CAREER AWARENESS

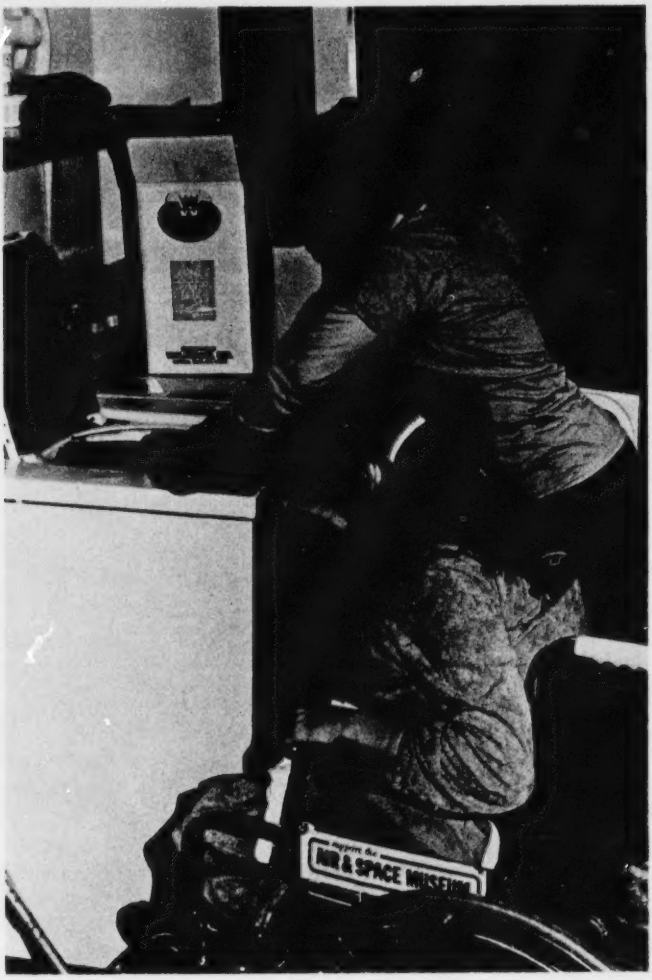
The person with a disability has a set of experiences that are different from those of a nondisabled person. In some respects, these differences may restrict the developmental process of career awareness. The severely disabled student, because of the inhibiting nature of the disability, may not have a set of career-related experiences similar to those of able-bodied children. These differences in experiences provide a different cultural base for the developing youngster. Their experiences in medical surroundings can be tapped as a source for career awareness activities.

Experiential differences are directly related to the disability. Physical or sensory impairment may have restricted the range of activities in which the child has participated. Such activities are part of the input necessary for the career development of the child. For example, many disabled children have never traveled to the city, to a ball game, or to a museum. Many have not had the opportunity to sleep away from home overnight. Many have not had direct peer interaction with able-bodied children and thus have not developed the social skills necessary to interact socially with their able-bodied and disabled peers of varied backgrounds. Many have not had experience with normal household chores that form a base for developing work-task-related skills. Many, also, have never had contact with the world of work. It is not uncommon to find a number of juniors and seniors who have not had any paid "work experience."

Given this experiential base, a number of disabled children will reach adulthood without the career awareness, social skills, and attitudes that contribute to personal and social adjustment. They will have an experiental base that is counterproductive to developing employment potential. The school, therefore, through its curriculum, must provide a sequence of activities that will build on what is already known about the knowledge and experience base of disabled students.

A major part of any career awareness curriculum must deal with broadening the perspective the student has for future potential careers. Classroom materials relate the world of work to the student's experience and most often are couched in terms of the fifteen Health, Education, and Welfare clusters. When these career awareness activities are infused into the school curriculum, the students learn the specific requirements for a variety of occupations. The students, through the use of the *Occupational Outlook Handbook* in career awareness activities, become aware of the projected needs of future careers and, based on this knowledge, can develop career plans consistent with the future needs of society.

While what is stated above is true of any career education program, the materials emphasize the needs of disabled children to face the problems of accessibility, job modifications, transportation, legal rights, and attitudes toward disabled people that directly (and continually) affect people who are disabled. The full career awareness curriculum is a subject of another monograph in this series. The above material is designed to whet the appetite of the reader to pursue the monograph series and implement as much of the program as described in his/her own school setting.



Significant Others

The focus of this paper thus far has been on activities relating to the developing person. However, this person does not develop in a vacuum. There is a need to develop activities and/or programs that will intervene in the life space of significant others to deal with their attitudes and/or mind set regarding the disabled person.

Significant others refers to the parents, family, and peers of the disabled, as well as education, rehabilitation, medical, and employment professionals who have entered their lives. It is beyond the scope of this paper to discuss these activities extensively. However, the remaining pages will touch briefly on what must be done with each of these groups as they relate to the career development of the severely disabled. Some of these activities are already underway at Human Resources Center as part of its research and training relating to career development. Other activities need to be developed for all of these groups to develop a consistent environment for the developing disabled adult. Such a consistent environment would stress the strengths of the disabled to foster within the individual the resolve to develop a life-style of his/her own choice that will provide a high degree of satisfaction which will extend throughout the adult years.

PARENTS/FAMILY

The family unit is the primary group within which the child develops. When a medical crisis affects a child, the child's entire family is affected. The "sick or impaired-child" syndrome is developed as the family relies on the medical team to restore the child to good health. However, once the medical crisis is over and medical stability is achieved, this syndrome remains part and parcel of the child's environment.

The basic role of the school must be to dedicate time to parent development. Most parents receive no training on parenting except that which

they have learned experientially at the mother's knee. The difficulties of raising able-bodied children are quite well known. Nobody expects to have to raise a disabled child. Because of this, there are no norms, no guidelines, no parameters within which parents may operate.

The stress of having a disabled child in a family is borne out by the high divorce and separation rate of parents of disabled children. For disabled children to develop with a sense of security, it is necessary for their families to remain intact. It is necessary to provide parents with a consistent support system to aid them in dealing with their own feelings relevant to parenting a disabled child, to teach them to cope with the identified stages (Clifford, 1979) of parenting a child, and to instruct them in the philosophy of the school program as described earlier. In this way, the parents will, in effect, be partners with the school. If they can adopt the philosophy of emphasizing the strengths of the child and not catering to the weaknesses, then a consistency bond can be formed between the school and the family. This philosophical bond is essential in order for the child to receive consistent signals from his/her significant others, centering on the strengths of the child and encouraging developmental growth related to the philosophy of the program espoused earlier. Without parents as partners, the program cannot succeed, since parents and families are the major formative agents in the critical periods of the child's life.

With regard to the career development of the child, the first link with the occupational system is the family. Parental occupations and general behaviors and preferences are taught and transformed into adult occupational life. Mitchell (1978) indicates that students are more likely to consult parents about their plans if their parents are highly educated. Regardless of educational level, however, parents may not have any occupational information relevant to particular skills to provide their children with appropriate career counseling. "Informed parents can do a better job of advising most students, leaving the counselors and teachers with ample time for studying and interpreting the characteristics and needs of the students" (p. 16).

Many parents of disabled children constantly express the concern "What will happen to my child after I'm gone?" An intervention program for these parents, relating to parenting skills, career development, and their legal rights will provide support during the formative years of the child. Guidance sessions to help parents to deal with their surface-level feelings related to raising a disabled child would also be a source of support as a means of ventilating these feelings. Models of such programs already exist. Last, when necessary, in-depth or individual group therapy may be necessary to deal with deeper feelings related to raising a disabled child. Such support, which should be forthcoming from schools and/or rehabilitation agencies, would help stabilize the home environment and minimize the psychological scars that may be unknowingly inflicted on the child.

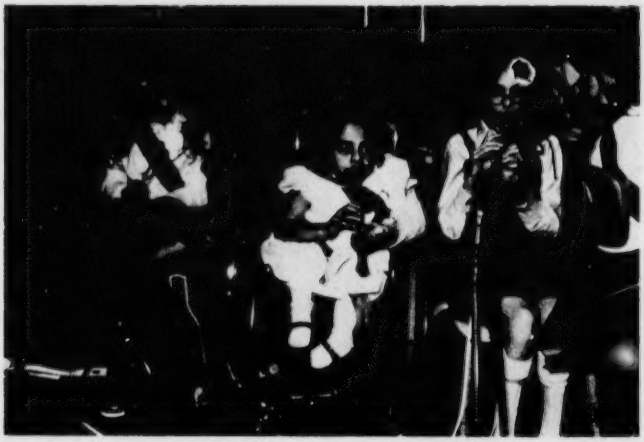
The same kind of support system is needed for the brothers and sisters of the disabled child. They too are dealing with emotions similar to the parents' and are in need of a mechanism for freeing themselves from these feelings, if a sense of balance and harmony in the family is to be maintained. Such a support structure must be forthcoming from the school and/or rehabilitation agencies, free of the medical presence in the structure. Such a medical presence, once the medical crisis has been arrested, only reinforces the sick role in the minds of the family and, in turn, will set the stage for them to transmit these signals to the child.

Last, there has been recent relevant federal legislation. Most parents are either grossly misinformed or not informed at all on their rights as outlined in such legislation. They know little or nothing about the services to which they are entitled under these laws. The school must take the leadership to provide information sessions for parents of disabled children, even though to do so may be at odds with the fiscal need of schools to curtail spending wherever possible. An informed parent can be a tremendous ally to the school program and, as such, can help shape an educational program that will stress the strengths of the student while not minimizing the effects of the disabling condition.

PEERS

Peer interaction is essential for the normal growth and development of the child. The severely physically disabled are frequently isolated because of the nature of their disability. In many cases, their social interaction with peers is quite painful because of the varied forms of rejection felt in such simple ways as being excluded from competition in the normal play activities of youth. Much of the social interaction for the severely disabled occurs in adult circles with parents and/or medical professionals. This, in turn, reinforces "I'm different" and, especially with the medical professional, "I'm sick" attitudes.

If students are in a special setting, such as Human Resources School, this social isolation can be mitigated through participation with students who have similar disabling conditions in an adapted physical education and/or recreation program. Special concerns arise when the student is mainstreamed into a highly competitive physical environment and is subjected to ridicule by peers for lack of participation or, even worse, isolated and made to sit in the bleachers as a passive observer of physical activity. Social isolation also occurs in normal play activities with constant rebuffs from children whose biting comments can cause deep psychological scars.



There is a need for planned social interaction programs between able-bodied and disabled students to help break down the walls which currently exist. It is the responsibility of the school and/or recreation programs to develop such programs. The need for a full program of leisure activities for disabled children is essential for the development of healthy, positive, self-fulfilling lives. The informal, interpersonal, social-skills learning that takes place through such activities is invaluable and will go a long way toward developing self-confident adults in later years.

REHABILITATION, EDUCATION, AND EMPLOYMENT PROFESSIONALS

Attitudes of rehabilitation and educational workers toward persons with disabilities and their career-related abilities may place unnecessary limits on the disabled person's individual optimal career opportunities. If professionals make unfounded assumptions about the general career development of the disabled person or do not work individually with each person on a total career plan, the professional, in effect, becomes an extension of that part of society that perceives the disabled as dependent. When this happens, professionals play only a limited role in long-term, successful career development of persons with disabilities.

Many professionals have the mind set that the disabled person is "sick" and therefore is unable to develop successful career plans. This attitude sets up a "Pygmalion effect" in the relationship between the person with the disability and the professional. The high rate of case closures as unemployable in the rehabilitation process attests to this. The high incidence of

dropouts and the "tokenism" entrance into college programs by the disabled attests to this mind set on the part of the educational professional. The continual placement of the disabled into entry-level jobs with no potential for career laddering is ample evidence that this mind set of lack of capability is also present in the employment professional.

The need is for the disabled person to be looked on by all members of significant others "as a capable person who can effectively manage his/her own life." Until this view is learned, through extensive training, internalized by interaction with the disabled community, and practiced through more positive behavior patterns toward the disabled, there is little hope that any degree of parity will be attained in comparison to able-bodied persons.

A school can develop a beautiful package of materials designed to enable the person to become aware of his/her strengths, develop decision-making skills to assume responsibility for his/her life, and provide information on an array of career opportunities for the student to choose from in developing a "life-style of choice." However, without the support system of significant others working in concert with the educational program, little or no progress can be achieved except in rare individual cases.

The decade of the eighties is, in reality, a decade of civil rights for the disabled, and this fact must be faced by all elements of American society. The legislation of the seventies has recognized and established the rights of the disabled to live in our society on a par with their nondisabled peers. In a sense, the disabled have arrived, as a minority. In a country where two-thirds of our population will be over sixty-five by the year 2000, this minority could quite easily represent the majority of the future.

This last section of this paper was designed to describe the magnitude of the problem beyond schooling that faces the disabled if their employment potential is to be met. It is meant to map out in broad strokes the work to be done in the years ahead if the disabled are to be able to maximize their personal freedom and dignity and assume responsibility for mapping out life-styles for themselves that will provide true satisfaction.

Career Education Overview

The specific content of the career education program is the subject of other monographs in this series. The materials that follow will provide the reader with a thumbnail description of the program in the hope that sufficient interest will be aroused to review these other monographs.

ELEMENTARY CURRICULUM MATERIALS — GRADES K—8

Teacher-made activities and prepackaged curriculum materials are interwoven in the regular classroom curriculum of language arts, social studies, mathematics, and science. Teachers do a minimum of two activities per month for at least forty-five minutes duration. Many do more!

During the first operational year of the program, many of the activities were superimposed from the outside, and allowance for career education time became a common practice. The broadening of the program to educational themes made it possible, during the second year, to have teachers identify materials they are currently using in the classroom and relate these to the three themes of the program. Where it was necessary, new teacher-made or prepackaged materials were added to the array of teaching materials.

The full range of activities for the themes of the programs is discussed in other monographs of this series. The reporting system relating to the implementation of lessons in the classroom is reported in the monograph related to evaluation of career education programs.

CURRICULUM ACTIVITIES — GRADES 9—12

Two major curriculum activities are the backbone of the program on the high school level. These are career guidance and the career-exploration program.

Career Guidance. Eight weekly group-guidance sessions dealing with the three themes of the program were developed for grades 9–12. Grades 9 and 10 essentially deal with values-clarification materials, with a sequence of activities designed to have the students encounter themselves, question their values, and develop new ways of approaching their life-styles. The activities deal with decision-making and self-knowledge skills. In grades 11 and 12, the thrust of career guidance centers around job-hunt skills, such as finding leads, developing a resume, interviewing for a job, social skills, grooming skills, and so forth. The full program is being developed now and will be described in another monograph related to this series.

Career Exploration Program. A five-stage career-exploration program for the severely disabled student has been developed. These stages include prevocational evaluation, shadowing experiences, skills training, work experience at Human Resources Center and work experience outside of Human Resources Center. A description of each stage follows:

1. *Prevocational evaluation* involves a two-week full-time evaluation administered by a rehabilitation specialist at Human Resources Center. The evaluation involves the interaction of the research team, the education team, and the rehabilitation team from the Center. The dynamics of this interaction are quite interesting and will be described in the monograph relating to the secondary program.

The prevocational evaluation is discussed at length with the student and his parents. Future plans are based on this evaluation. Currently the evaluation is taking place in grades 11 and 12. Future plans involve adapting elements of this evaluation to younger age groups in order to get a working knowledge of the student at as young an age as possible, without destroying the validity and reliability of the testing instruments. The goal of lowering the age level is to get the Office of Vocational Rehabilitation involved earlier than age sixteen on more than an "exception" basis.

2. *Shadowing experiences* are available at Human Resources Center, which includes a school, a research institute, a rehabilitation service agency, and a competitive demonstration factory. It includes a personnel office, an accounting department, and a development office. In short, it provides access to a myriad of career opportunities across the Center. In each of the major areas of the Center, a range of

career opportunities from entry to managerial level has been identified through a cooperative effort with the personnel department. A series of two-week experiences has been arranged so that a student may spend up to ten one-hour sessions in each area of the Center. At this time, the student will have an opportunity to observe and interview an employee on-the-job. During this ten-hour experience, the student may experience ten career opportunities at varied levels within each major area of the Center. The experience may be repeated in other areas of the Center so that the student may explore a wide variety of career opportunities.

3. *Skills training*, through the rehabilitation services at Human Resources Center, currently comprises training programs in clerical skills, computer programming, and electrical work. Students may receive such training as part of their regular school experience. At this writing, plans are being developed to expand these training activities.

4. *Work experience at Human Resources Center* is a program whereby a paid work experience for selected students has been implemented, using the model developed in the shadowing experience. Students work for ten hours per week during the school year and a full work week during the summer. The minimum hourly wage is paid. During the summer, transportation is handled through the Center.

5. *Paid work experience outside Human Resources Center* is available for selected students. The outreach program capitalizes on the Summer College Work Experience of the Center for Disabled College Students.

The full development of the entire secondary program is currently taking place at this writing. It will be the subject of a future monograph in which all of the details and problems involved in setting up the program will be discussed.

ACTIVITIES ACROSS THE TOTAL SCHOOL PROGRAM

There are three activities that are school-wide and go beyond the individual class curriculum, guidance, and individual student activities. These are: the Speakers' Bureau, the Business Ventures Program, and Field Trips. Each of these has specific competencies and is implemented on a broad base across the total school program.

The Speakers' Bureau involves one speaker per week coming to the school to discuss his/her career. The students are being trained in interviewing techniques so that they can learn the types of questions to ask. Many of the speakers are severely physically disabled themselves and, besides speaking about their careers, provide excellent role models for the students. In many cases, the discussion extends to problems related to independent living and/or personal reaction to being disabled.

Business Ventures are simply activities designed to acquaint the students with the need to plan, implement, and evaluate an activity — especially one that is designed to make money. On the elementary level, the activities are conducted on a classroom basis. On the secondary level, the activities are conducted through the student government, using a Junior Achievement model.

Field Trips serve two purposes: a) Students become aware of a variety of career opportunities in the local community; and b) they develop the capacity to plan for and cope with environmental barriers the students will encounter on any trips outside the school environment. Competencies have been developed for the field trips reflecting the developmental theme of the program with heavy teacher involvement in planning field trips at the younger level and heavy student involvement in such planning at the high school level.

Each of these school-wide activities is the subject of an individual monograph in this series.

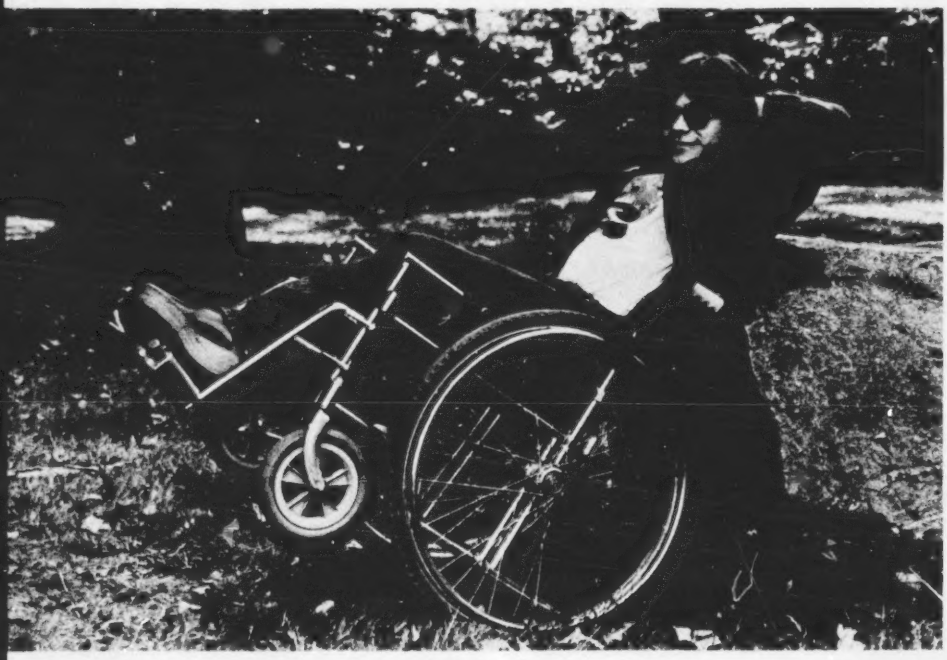
EVALUATING THE PROGRAM

A two-year evaluation design has been developed for the entire program. The patterns of development related to career maturity, locus of control, and self-concept are measured by the Critics Career Maturity Inventory, The Nowicki-Strickland Locus of Control Scale, and the Piers-Harris Self Concept Scale.

Comparison schools have been selected to determine the similarities and differences between students exposed to the program and students not similarly exposed. Pre-testing took place in 1979, with post-testing and post-post testing in May 1980 and May 1981 for the students in Human Resources School. Comparison-group pre-testing will take place in May 1980, and post-testing, in May 1981. Longitudinal and comparative analysis will be conducted between and within groups. Specific elements of the program have different competencies and are measured through observation and/or interview techniques. The full evaluation of the program is the subject of another monograph in this series.

This brief description does not do justice to the total program. A full exploration of the monographs related to each of the elements described above will provide the reader with ideas related to the trials and tribulations of implementing a full-scale program in this school. It is hoped that the experience gained from the work at Human Resources Center will pay dividends for future counselors, educators, and/or curriculum developers who may be required to develop similar programs for students in their schools.

The theoretical framework and its basic constructs are based on the best available literature that the staff has reviewed in developing our program. The point of view that is taken is strong, dynamic, and interactive and, to be implemented, requires a full-scale commitment from the school staff, parents, and other professionals to work together to intervene in the career-development process of the disabled, to improve their future career potential and to ease their transition from school to other life-styles that will lead to self-fulfilling lives as adults.



References

Allport, G. *Becoming.* New Haven, CT: Yale University Press, 1955.

Berkowitz, N., Englander, V., Rubin, J., & Worrall, J. *An evaluation of policy-related rehabilitation research.* New York: Praeger, 1975.

Calhoun, M.L. *Teaching and learning strategies for physically handicapped students.* Baltimore, MD: University Park Press, 1979.

Clifford, C. *Parental skills program for parents of handicapped children.* Houston, TX: Interaction Inc., 1979.

Crites, J. *Career maturity inventory.* Monterey, CA: McGraw-Hill, 1978.

DeJong, G. *The movement for independent living: Origins, ideology and implications for disability research.* East Lansing, MI: Michigan State University, 1979.

Foster, J., Szoke, C., Kapisovsky, P., & Kriger, L. *Guidance, counseling, and support services for high school students with physical disabilities.* Cambridge, MA: Technical Education Research Centers, Inc., 1977.

Gleedman, J., & Roth, W. *The unexpected minority: Handicapped children in America.* New York: Carnegie Council on Children, 1980.

Goleman, D. 1,528 little geniuses and how they grew. *Psychology Today,* February 1980, *13*(9), 28-54.

Hansen, L.S. *An examination of the definition and concepts of career education.* Washington, DC: U.S. Government Printing Office, June 1977.

Levitan, S., & Taggart, R. *Jobs for the disabled.* Baltimore, MD: Johns Hopkins University Press, 1977.

Mitchell, A.M. *Career development needs of seventeen year olds: How to improve career development programs.* Washington, DC: American Personnel and Guidance Association, 1978.

Nowicki, S., Jr., & Strickland, B.R. A locus of control scale for children. *Journal of Consulting and Clinical Psychology,* 1973, *40,* 148-154.

Occupational outlook handbook, 1978-79 edition. Washington, DC: U.S. Bureau of Labor Statistics, Bulletin 1955, 1978.

Piers, E.V., & Harris, D.B. *The Piers-Harris children's self concept scale.* Nashville, TN: Counselor Recordings and Tests, 1969.

Pless, I.F. Individual and family needs in the health care of children with developmental disorders. *Birth Defects,* 1976, *12* 91-102.

Safilios-Rothschild, C. *The sociology and social psychology of disability and rehabilitation.* New York: Random House, 1970.

Tiedeman, D.V., Katz, M.R., Miller-Tiedeman, A., & Osipow, S. *The cross sectional story of early career development as revealed by the National Assessment of Educational Progress.* Washington, DC: National Vocational Guidance Association, and Association for Measurement and Evaluation in Guidance, 1978.

Wright, B. An analysis of attitudes: Dynamics & effects. *New Outlook for the Blind,* March 1974, *68(3),* 108-118.

The Career Education Program

The Career Education Program at Human Resources Center is built around three themes: self-concept, decision-making as it relates to relative independence, and career awareness. These three themes permeate the entire K–12 program and reflect the developmental patterns of the student as he/she passes through the career development process. A career is a life-style of choice. The educational program is designed to enable the student to develop a realistic appraisal of self, to develop decision-making skills that direct the individual to an increasing sense of control of his/her life-style, and to enable the student to have sufficient knowledge of career opportunities so that decisions related to career choices are not made in a vacuum. To this end the career education program includes:

1. Career Education Curriculum K–8 — This consists of activities related to the above themes that can be infused into the regular curriculum of the school.

2. Career Guidance 9–12 — This consists of ten-week group guidance programs for each of the four grade levels, with materials related to the three themes developed in increasing depth and intensity throughout the high school experience.

3. Speakers' Bureau 4–12 — Speakers associated with varied career opportunities relate information regarding their work to students grouped according to grades 4–6, 7–8, and 9–12. Approximately fifty percent of the speakers are severely disabled and, in effect, provide role models for the students. The culminating experience for this aspect of the program will be a career day planned jointly with able-bodied students from a neighboring school. Parents will be invited to attend both the Speakers' Bureau and the career day.

4. Business Ventures — Classroom business ventures develop student skills in planning, implementing, and evaluating actual business endeavors through "hands-on" experiences. The establishment of an advertising company, a recycling company, a woodworking store, and other businesses help students gain educational as well as business experience. These real-world learning situations are integrated into the school program. The intent of the Business Ventures

program is to have students assume more responsibility for the conduct of the ventures as the students reach senior high school. This will enable students to develop their decision-making skills more fully and, therefore, increase their sense of control over their environment through experience with simulated business ventures.

5. Field Trips — Field trips centering around career opportunities are an integral part of the program for educational enrichment of the child. These outside experiences thrust the students into varied environments, which enable them to come to an understanding of their mobility potential, and provide opportunities for social growth beyond the classroom experience.

Media presentations develped for use in Human Resources Center's 360° Planetarium/Theater bring inaccessible environments to the students. These productions, focusing on work in factories, restaurants, radio stations, newspapers, and other career areas help students gain career insights.

6. Work Experience Program — The work experience program consists of five experiences requiring increasing responsibility with regard to mobility skills and level of personal independence. The program begins with a functional capacities evaluation and/or a prevocational evaluation as early as grade 9. Shadowing experiences, which allow students to observe workers at work sites, are provided in grades 9 and 10. Skills training takes place in grades 10 and 11. Work experience placements in Human Resources Center occur in the spring of the senior year with the goal being transition to full-time employment upon graduation.

7. A Transitional Living Experience — An independent-living-skills curriculum has been developed by Human Resources School. This involves classroom instruction and a live-in experience of various duration related to grade level in an adapted home environment. The purpose of the program is to promote student independence. This field experience is the culmination of curriculum activities that relate to self-concept and decision-making skills.

8. Research and Related Studies — The research model involves a longitudinal assessment of the impact of the total educational program on the self-concept, locus of control, and career awareness and interest of the students from K through 12. Standardized components, such as the speakers' bureau, business ventures, field trips, and the transitional living experience will be evaluated as to the competencies they have developed through criterion-referenced tests. A data bank on the students has been established and will be used as a source to generate research problems for further study. Last, a follow-up study of graduates will be pursued to develop case studies

relating to the problems encountered in effecting the transition from school to work.

The National Career Education Advisory Council has assisted in the development of the total program. Council members continually participate in the planning and direction of the program.

NATIONAL CAREER EDUCATION ADVISORY COUNCIL

Mary Lynne Calhoun, Ph.D.
Coordinator of Training
Human Development Center
Winthrop College
Rock Hill, SC

Saul Dulberg, Ph.D.
Director of Career Education
Connecticut State Department of Education
Hartford, CT

Norman Gysbers, Ph.D.
Professor of Education
University of Missouri
Columbia, MO

Paul G. Hearne, J.D.
Executive Director
Just One Break, Inc.
New York, NY

Robert Hoppock, Ph.D.
Professor Emeritus
Counselor Education
New York University
New York, NY

Joel Magisos, Ph.D.
Center for Vocational and Technical Education
Ohio State University
Columbus, OH

Sidney P. Marland, Jr., Ph.D.
President Emeritus
College Board Testing Services
New York, NY

Philip Merrifield, Ph.D.
Director of Research Design and Measurement
New York University
New York, NY

Harold Munson, Ed.D.
Professor and Chairman
Center for the Study of Helping Services
University of Rochester
Rochester, NY

Human Resources Center: An Overview

HUMAN RESOURCES CENTER is a private nonprofit organization dedicated to providing educational, vocational, social, and recreational opportunities for severely disabled children and adults. The Center's broad spectrum of programs encompasses job training and placement, academic and vocational education, independent living, research, and information dissemination. Founded in 1952 by Dr. Henry Viscardi, Jr., HUMAN RESOURCES CENTER is today composed of Abilities Inc., Human Resources School, the Research and Training Institute, and the national Center on Employment of the Handicapped located on our campus.

Abilities Inc. This original unit of Human Resources Center conducts programs of work evaluation, training, job development, and career placement for disabled adults. Its work center demonstrates the capabilities of disabled workers to function in an industrial environment. Fields of employment include banking, data processing, electronics, telephony, and other clerical and industrial operations.

Human Resources School A specially adapted facility, the School offers tuition free education to over 200 severely disabled children. Chartered by the Board of Regents of the State of New York, it provides a full academic curriculum and extracurricular program to previously homebound children from infancy through high school level, as well as a summer educational and recreational program.

The Research and Training Institute This unit conducts long range studies in the career preparation process for severely disabled individuals, initiates and develops demonstration projects in rehabilitation and professional training, and disseminates information aimed at enhancing the employability and quality of life of persons with disabilities.

The national Center on Employment of the Handicapped Established in 1977, the national Center on Employment of the Handicapped assists communities across the nation by bringing together labor, industry and rehabilitation forces to develop employment opportunities for disabled Americans. In addition, the employers receive assistance in their efforts to employ the

handicapped. The nucleus of this national Center is the Industry-Labor Council, an outgrowth of the White House Conference on Handicapped Individuals.

HUMAN RESOURCES CENTER EXECUTIVE STAFF

Henry Viscardi, Jr., LL.D., L.H.D., Litt.D., Sc.D., F.R.S.A.
President, Chief Executive Officer
Human Resources Center

Arthur Nierenberg
Executive Vice President
Human Resources Center
President of Abilities Inc.

Frank D. Gentile, L.H.D.
Vice President of Special Projects
Human Resources Center

Jack Victor, Ph.D.
Director of Research and Research Utilization
Human Resources Center

Frederick Shore, Ed.D.
Superintendent
Human Resources School

Mel Holtz, M.A.
Vice President and General Manager
Abilities Inc.

Michael Jennings, J.D.
Vice President and Treasurer
Human Resources Center
Director of Administrative Services

Hans Krobath
Vice President of Engineering
Human Resources Center

PROJECT PREP PROFESSIONAL ADVISORY COUNCIL

Sheila H. Akabas, Ph.D.
Regional Rehabilitation Research Institute of Industrial Social Welfare Center
The Columbia University School of Social Work
New York, NY

Monroe Berkowitz, Ph.D.
Bureau of Economic Research
Rutgers University
New Brunswick, NJ

Elizabeth Boggs, Ph.D.

Brian F. Bolton, Ph.D.
Rehabilitation Research and Training Center
University of Arkansas
Fayetteville, AR

Leonard Diller, Ph.D.
Institute of Rehabilitation Medicine
New York University Medical Center
New York, NY

Richard C. Engelhardt (Ex Officio)
Rehabilitation Services Administration
HEW — Office of Program Development
Washington, DC

George Engstrom (Ex Officio)
Rehabilitation Services Administration
HEW — Office of Program Development
Washington, DC

Donald E. Galvin, Ph.D.
International Rehabilitation Special Education Network
Michigan State University
Lansing, MI

James F. Garrett, Ph.D. (Ex Officio)
World Rehabilitation Fund, Inc.
New York, NY

Lawrence D. Haber
Office of Federal Statistical Policy and Standards
Department of Commerce
Washington, DC

Joseph Moriarty, Ph.D.
West Virginia Research and Training Center
Dunbar, WV

Saad Z. Nagi, Ph.D.
Mershon Center
The Ohio State University
Columbus, OH

Edward V. Roberts
California State Department of Rehabilitation
Sacramento, CA

Stan Sadofsky (Ex Officio)
Rehabilitation Services Administration
HEW — Human Development Services
Washington, DC

Basil Y. Scott, Ph.D.
Office of Vocational Rehabilitation
New York State Education Department
Albany, NY

PROJECT PREP STAFF

Jack Victor, Ph.D.
Director of Research and Research Utilization

Gail Batter
Junior Administrative Assistant

Jane Berger, B.F.A.
Graphic Designer

J. Richard Block, Ph.D.
Research Consultant

Edward Colverd, M.A.
Driver Education Supervisor

Margaret G. Desmond, M.I.D.
Research Associate

William Frohlich, M.A.
Communications Specialist

Amelia B Gottlieb, M.A.
Research Associate

Lenore R. Greenberg, M.L.S.
Research Librarian

Suzanne Hamberg, M.S.
Technical Writer

Rose Harvey, B.A.
Trainer/Project Coordinator

Eugene Hedley, Ph.D.
Director of Employment Research

Paul Henfield, M.A.
Research Associate

Marcy Hochman, M.S. CRC
Trainer/Project Coordinator

Charles A. Lindberg, B.S.
Director of Training and Information Services

Lorraine Loffredo, M.B.A.
Budget Administrator

Catherine Lombardi, M.S.
Research Associate

Henry McCarthy, Ph.D.
Research Specialist

John T. Palmer, Ph.D.
Director of Education Research

Elizabeth Pan, Ph.D.
Research Evaluation Consultant

Gary Lee Persip, M.S.
Research Associate

Marcella Putala, A.A.S.
Products Manager

Charles Rogener, B.S.
Driver Education Instructor

Lana Smart, M.A.
Research Associate

Maria Stieglitz, M.S.
Research Associate

Jessica Swirsky, M.A.
Research Associate

David Vandergoot, Ph.D.
Director of Rehabilitation Research

Veronica Washam, M.A.
Research Associate

Judy Young, M.A.
Research Associate

Harold E. Yuker, Ph.D.
Research Consultant

Regina Zedalis
Administrative Assistant

Human Resources Center Publications

PROJECT PREP PUBLICATIONS

Affirmative Action in Action! Strategies for Enhancing Employment Prospects of Qualified Handicapped Individuals by H. McCarthy and L. Smart.	$ 2.60*
Attitudes Toward Persons with Disabilities: A Compendium of Related Literature by J. Schroedel.	$ 8.25**
Career Education for Physically Disabled Students: A Bibliography by M. Stieglitz and J. Cohen.	$ 11.25*
Career Education for Physically Disabled Students: Career Awareness Curriculum (K–8) by M. Stieglitz. (Available September 1980)	
Career Education for Physically Disabled Students: Classroom Business Ventures by J. Cohen and M. Stieglitz. (Available September 1980)	
Career Education for Physically Disabled Students: Self-Concept Curriculum (K–8) by M. Stieglitz. (Available September 1980)	
Career Education for Physically Disabled Students: Speakers' Bureau by M. Stieglitz and J. Cohen. (Available September 1980)	
A Compendium of Placement-Related Literature by D. Vandergoot, P.B. Avellani, and R.J. Jacobsen.	$ 9.25**
Employer Attitudes Towards Hiring Persons with Disabilities: A Labor Market Research Model by J. Schroedel and R.J. Jacobsen.	$ 4.75*
A Handbook of Placement Assessment Resources by J. Swirsky and D. Vandergoot.	

*Please add 20¢ for postage and handling for all single copy orders and 45¢ for two (2) copies or more.

**Please add 45¢ for postage and handling for all single copy orders and 90¢ for two (2) copies or more.

***Please add 75¢ for postage and handling per set.

****Please add $20.00 for postage and handling per set.

New Directions for Placement-Related Research and Practice in the Rehabilitation Process by D. Vandergoot, R.J. Jacobsen, and J.D. Worrall. $ 2.75*

Recruiting Qualified Disabled Workers: An Employer's Directory to Placement Services in the Greater New York Area, compiled by L. Smart. (Available September 1980)

A Review of Placement Services within a Comprehensive Rehabilitation Framework: A Survey Report by R.J. Jacobsen, D. Vandergoot, P.B. Avellani, and J. Swirsky. $ 5.50*

A Review of Placement Services within a Comprehensive Rehabilitation Framework: A Technical Report by D. Vandergoot, J. Swirsky, R.J. Jacobsen, and P.B. Avellani. $ 11.25*

Work Independence and the Severely Disabled: A Bibliography by G. Bilotto and V. Washam.

HUMAN RESOURCES CENTER MONOGRAPHS

Evaluating Driving Potential of Persons with Physical Disabilities by M. Less, E.C. Colverd, J. DeMauro, and J. Young. $ 2.75*

Hand Controls and Assistive Devices for the Physically Disabled Driver by M. Less, E.C. Colverd, J. Dillon, and J. Young. $ 2.75*

Individualized Health Incentive Program Modules for Physically Disabled Students for Grades Kindergarten through Twelve by K. Reggio, J. Davidson, and D. Schooltz.

- Environmental and Community Health
- Sociological Health Problems
- Mental Health and Family Life Education
- Physical Health
- Safety and Survival Education

$4.50* per volume, $17.50*** per set

Teaching Driver Education to the Physically Disabled by M. Less, E.C. Colverd, G.E. DeMauro, and J. Young. $ 3.75*

Teacher's Preparation Course in Driver Education for the Physically Disabled by E.C. Colverd, M. Less, G.E. DeMauro, and J. Young. $ 3.25*

The Development and Evaluation of a Pre-School Curriculum for Severely Disabled Children by Human Resources Center. $ .80

INDUSTRY-LABOR COUNCIL PUBLICATIONS

Challenging Barriers to Change: Attitudes Towards the Disabled by H.E. Yuker and J.R. Block.	$ 2.75*
Ready, Willing & Able! What You Should Know About Workers with Disabilities by L. Bozza, Edited by C. Lindberg.	$ 3.25*

INA-MEND INSTITUTE BOOKLETS

No. 1	*General Information to Help the Recently Disabled* by A. Tritell.	$ 1.50*
No. 2	*The Rehabilitation Facility and Its Specialists* by A. Tritell.	$ 1.50*
No. 3	*Financial Assistance for the Disabled* by A. Tritell.	$ 1.50*
No. 4	*Vocational and Educational Opportunities for the Disabled* by A. Tritell.	$ 1.50*

RECREATIONAL PUBLICATIONS

Boating for the Handicapped: Guidelines for the Physically Disabled by E. Hedley.	$ 5.65*
A Report on the State of the Art, National Recreational Boating for the Physically Handicapped: Strategy Paper & Annotated Bibliography by Human Resources Center.	$ 4.50*

BOOKS BY DR. HENRY VISCARDI, JR.

President and Founder of Human Resources Center

A Laughter in the Lonely Night	$ 5.00**
... a Letter to Jimmy	$ 3.50**
A Man's Stature	$ 6.95**
But Not on Our Block	$ 6.95**

Give Us the Tools	$ 5.00**
The Abilities Story	$ 6.95**
The Phoenix Child: A Story of Love	$ 7.95**
The School	$ 5.95**

AUDIOVISUAL MATERIALS

Modular Placement Training Program $600.00***

- An innovative approach to job placement training for Vocational Rehabilitation Professionals.
- The set of 12 self-contained modules may be utilized independently or as a complete package.
- Each module contains:
  - Slides
  - Cassette Tape
  - Overhead Transparencies
  - Trainer's Manual
  - Participants' Handbooks

Module 1: Placement: An Innovative Perspective
Module 2: Job Readiness
Module 3: Working with Employers I
Module 4: Affirmative Action, Section 503
Module 5: Working with Employers II
Module 6: Follow-up
Module 7: Awareness Programming
Module 8: Section 504
Module 9: Working with Employers III
Module 10: Self-Placement Skills I
Module 11: Self-Placement Skills II
Module 12: Job Analysis

REHABILITATION SERIES MONOGRAPHS

A Study of Workmen's Compensation in Relation to Sheltered Workshops by H. Viscardi and I.M. Friedman.	$ .80*
Matching Job and Worker Characteristics, Work Supplement for the Aged by H. Viscardi, F. Gentile, G. Graham, and J. Block.	$ .80*

Measurement of Cardiac and Respiratory Responses in Physically and Non-Disabled Groups in a Variety of Psychological and Industrial Conditions by Human Resources Center.	$ .80*
Skill Analysis as a Technique for Predicting Vocational Success of the Mentally Retarded by G. Manus, M. Kovacs, N. Roberts, and B. Levy.	$ .80*

Books must be ordered by full title.

Prices are subject to change without notice.

Payments must be made in U.S. currency.

To order or for complete catalog please contact:

Products Manager
Human Resources Center
I.U. Willets & Searingtown Rds.
Albertson, NY 11507